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LECTURES.

CLINICAL LECTURES ON THE PHYSIOLOGICAL PATHOLOGY OF SYPHILIS.[1]

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THE *locality* of the syphilitic papule is found to influence its development to a greater or less extent. Thus, when the papular eruption appears on the hairy scalp, it is usually sparse, and covered with serous scabs. When situated in the depending portions of the body, as about the ankles, the papules tend to become pustular, and occasionally present as ulcerations of considerable size. When occurring upon mucous membranes, the papular eruption assumes the peculiar and characteristic features usually described by authors as the *placque muqueuse*, or the mucous patch, commonly and best seen in the mouth and upon the mucous membrane of the faucial regions. In appearance it is like superficial erosion, covered with, or bordered by, a diphtheretic exudation of a pale gray color. When on the borders of the lip, it approaches more to the papular form. Papules situated on integument in the *vicinity* of mucous membrane, as at the anus, when they are subjected to continued moisture, and also for the same reason when about the scrotum or between the fingers or toes, appear as broad papules, often considerably elevated, eroded, more or less covered with the diphtheritic deposit, and exuding a serous secretion which decomposes easily, and are commonly associated with a characteristic disagreeable odor. These moist papules, to distinguish them from the mucous patch, and from their greater elevation, are called *mucous tubercles*. In the presenting case, in addition to the *corona veneris* and the papules which we have seen scattered over his body, I now call your attention to a characteristic *mucous patch* on the inner surface of the cheek, just in apposition with the second and, in his case, last molar tooth. This suggests the

[1] Concluded from page 648.

clinical fact that any external source of irritation, as the edge of a tooth or the stem of a tobacco pipe, will often determine the locality of a mucous patch. The irritation of tobacco smoke, or its juice, not only tends towards the development of the mucous patch, but often prevents its healing, indefinitely, under the best treatment.

Exudation and accumulation of cells *into the structures of the eye* are occasionally associated with the papular period of syphilis, and from the sensitive character of these tissues, are prone to result in a greater or less degree of inflammatory action. Infiltration of cells and plastic material into the iris sets up an iritis, which is termed syphilitic, but which is said by authorities to be in no way distinguishable from a simple or rheumatic iritis.

When it is remembered that it is the resistance, in other words, the *friction*, that affects the velocity of the blood stream; that the velocity "*is least in the capillaries;*" and, further, that "*contact with tissue and relative rest* of the white or tissue building cells induces *first* to essay their *mobility*, then to *division;*" when, still farther, we consider it is thus evidently the *anatomical hindrances* to the velocity of the circulation in the papillæ cutis that determines the abnormal cell proliferation and accumulation which results in the papular eruption of syphilis, we can then readily understand why the capillary vessels of the eye should become the occasional seat of localized cell accumulation at the time when it is going on in the papillæ cutis. Clinically, we find that this is the case, and that fifty per cent. of all the cases of iritis, from all causes, occur during this period of syphilis. In certain instances, in addition to the plastic exudation into the iris, producing its characteristic interferences with mobility and transparency, the exudation extends in the form of an irregular nodule into the anterior chamber of the eye, sometimes as large as a small pea. This is usually termed the *syphilitic gummy tumor of the iris.* But this gummy tumor is virtually identical, microscopically, with that of the syphilitic papule of the papilla cutis. It is composed, according to Wagner and others, "of colorless blood corpuscles, for the most part cells with a single and large nucleus and free nuclei, which, single or few in number, are imbedded in a connective tissue, poor in vessels."[1] In short, the so-called gummy tumor of the iris would appear to be but a syphilitic papule developed in a locality imposing no restraint, and hence its loose texture and irregular nodular form. Its occurrence at the same period, and its amenability to the same treatment of the syphilitic papular eruption of the skin would seem to give further support to such a view.[2]

[1] Wagner's General Pathology, American edition, page 434.

[2] Bäumler, Ziemssen's Encyc., vol. iii, p. 224. Von Graefe and Colberg have shown that "punctate deposits occur in syphilitic iritis, — chiefly upon the inferior half of the posterior

Plastic nodules scattered over the choroid are also occasionally met with in this period of syphilis, sometimes quite independently of iritis, and consisting, microscopically, of simple cell elements. A growth of cells, supposed to be of the same character, has been described by Von Hippel "as having been found in the choroidal and sclerotic coats, as well as in the ciliary body, during this period of syphilitic disease." [1] In short, it will be seen that blood capillaries, *in any peripheral location*, may become the seat of the arrest and excessive proliferation of the morbid cell elements at this period of syphilitic infection. Even in the deeper structures, as the bones, and probably from the same causes, points of soreness, and sometimes of bony elevation occur. Pains in the bones are so often met with in the papular stage of syphilis that they are considered characteristic of this stage of the disease. These, while usually complained of as general, will be found to proceed from certain limited points of tenderness, and will be recognized on those bones within easy reach, as the top of the skull and the inner surface of the tibia. Sometimes slight elevations will be discovered. Intra-osseous or sub-periosteal pressure, which would be caused by the deep-seated cell accumulation, will account for the pain, and also the inflammatory action in the cases where it occurs. A simple swelling sometimes results, which may subsequently, through natural causes, become the seat of true bony deposit. It is then called *a node*.

When we consider that not alone are the syphilized or imperfect cells coursing through the ordinary channels of the blood and lymph circulation, but that a migration of individual cells may take place, independently of those channels, into any contiguous living structure, there to establish new foci of proliferation, we shall find but little difficulty in accounting for cell accumulations in curious and rare localities, and, from influences peculiar to such localities, resulting in a great variety of external manifestations. The tendency of all cell accumulations, not necessary to the growth or nutrition of a part, is normally toward spontaneous removal, and return into the general circulation, or by a natural process of fatty degeneration, to be subsequently eliminated. This is especially the case in syphilis, where the accumulations are made up of hastily generated and imperfectly developed cells. Consequently, we find that in the natural history of this disease the cell accumulations in the skin, lymphatic vessels and glands, bones, etc., may disappear entirely in the course of a few months, and if no ulceration has occurred, without leaving any cicatrix, although the site of the papular eruption may be marked by a coppery stain for some time after.

surface of the cornea, or else in the form of a yellowish red papule, from the size of a pin's head to that of a pea, which is usually situated at the margin of the pupil, *and consists of a circumscribed proliferation of cells,*" in other words, it represents *a papule.*

[1] Bäumler, Ziemssen's Encyc., vol. iii. p. 224.

Relapses of the accumulations occasionally take place at irregular points, especially in the skin and mucous membranes, evidently from influences of local origin; for these manifestations are never symmetrical, as in the general papular eruption, thus indicating that the exciting causes do not come from the general circulation. It seems most probable that this accident is due to the liberation of still active disease cells from isolated points (inferentially lymphatic glands) which have been for a time separated from the general lymph current by obstructions (in the interior, or of their efferent vessels), from accumulations in the earlier stages of the disease. Such accidents in cancerous disease have led Virchow to the statement that lymphatic glands act as depots for diseased cells, often retaining them for a considerable period without disturbance of the adjoining vessels or structures.[1]

It is well for you to know that syphilitic eruptions of the skin have been elaborately classified by authorities, according to their real or supposed resemblance to the simple diseases of the skin. For purposes of differential diagnosis, it is well for you to be familiar with their similarities and their unlikenesses with such diseases. It is also well that numerous other lesions of syphilis are described by authors with great faithfulness and minuteness as to dates of appearance, locality, and physical peculiarities, etc.; and, as opportunity presents, I shall endeavor to make you familiar with all the phases so described. But I can say to you *now* that the fact of chief importance which concerns you, and which under no circumstances should be lost sight of, is that the manifestations of syphilis occurring throughout the active periods of the disease (which usually lasts from six to eighteen months) *are, without exception, dependent solely upon a localized cell accumulation*, and that the principle of treatment in each and every case must be precisely the same, namely, by the use of such measures, general and local, as are known to be best calculated to assist nature in producing fatty degeneration and elimination from the infected organism of this abnormal, excessive cell accumulation, and at the same time to preserve and improve the general health of the patient.

DERMOID CYST OF THE OVARY.

BY W. H. BAKER, M. D.

THE frequency with which tumors of the ovaries are now operated upon, not only by the few who have become world-renowned thereby, but by the masses of surgeons in every country, makes the report of common cases both tedious and annoying, and adds but little to our real knowledge of the subject. The individual case may, however, be of

[1] Virchow's Cellular Pathology, second American edition, page 221.

great interest or importance, on account of some deviation from the usual course in its development, its relations with the surrounding viscera, or some change in the method of operating; or yet again on account of the subsequent treatment and the results obtained. In such instances the failure to report cases is certainly to be regretted, for they may encourage others to establish a like happy result, or warn them against the means which led to a fatal termination.

It is on this account that it seemed desirable to place on record the following case. We have failed to find an exactly similar one, and feel sure that, while they may exist, they must be rare: —

Case. The patient was kindly referred by Dr. O. W. Doe to the Free Hospital for Women, where she entered October 3, 1878. She was a native of Scotland, thirty-one years of age, and had been married seven years. There had been but one pregnancy, which occurred about two years after her marriage, and terminated in the birth of a still-born child after a most tedious labor of three days, delivery being finally accomplished by the use of forceps. Menstruation began at thirteen years of age, and occurred irregularly each twenty to twenty-five days, lasting three days. She always suffered from dysmenorrhœa, with the exception of which she considered herself well until the birth of her child; but since this she has been confined to the bed much of the time.

On her admission to the hospital she complained of great pain in the back, confined to the sacral region, of profuse leucorrhœal discharge, of general debility, and of but partial retentive power over the bowels. There was also an inability to sleep comfortably on the right side, on account of pain thus caused in the inguinal region of that side.

Physical examination revealed a laceration of the perinæum through the sphincter muscle, cystocele, and a bilateral laceration of the cervix, with great eversion and hyperplasia. There was also a mass in Douglas's pouch which felt not unlike the body of the uterus in a retroflexed position, but there was present such extreme sensitiveness of the uterus, both by the vagina and over the hypogastrium, that it seemed inadvisable to pass the probe until some of this hyperæsthesia should be reduced by the hot vaginal douche. For nearly three weeks the treatment consisted of these hot-water injections, tonics, rest, and a good, nourishing diet. At the end of this time there was much less sensitiveness, and examination with the uterine probe showed the uterus to be anteflexed and three and a half inches deep.

November 7th the patient was etherized for the purpose of determining the character of the mass behind the uterus. The examination then showed the cervix uteri crowded down against the pubic bone, while the uterine body, considerably enlarged, was anteflexed, rising about three inches above the superior border of the symphysis pubis. Behind the uterus was the mass already referred to, which was equal in size to a small cocoa-nut, immovable, quite filling the excavation of the pelvis, and giving indistinct evidence of fluctuation. Selecting the largest needle of the Codman and Shurtleff aspirator, it was inserted into the tumor through the vagina at a point one inch behind the cervix uteri in the median line. Eight ounces of a yellowish fluid were removed, which on standing a few hours became quite thick and caseous, and, subsequently examined by the aid of the microscope, was proved to be the products of a dermoid cyst. At the time that this fluid was flowing through the aspirator its appearance was so like that of pus that we seemed to be dealing with a pelvic abscess; and it was not until a free opening had been made into the cyst and the oily parts of the fluid had begun to collect on the surface that the true nature of the case was determined. In enlarging the opening by the vagina with the bistoury, the peritoneal cavity was opened, and it became necessary either to remove the cyst through the vaginal incision, or in some way to prevent the discharge of the cyst from coming in contact with the peritoneal membrane. It was noticed that the cyst did not collapse after the removal of the fluid, but that its upper part seemed to be adherent to the upper part of the pelvis, particularly on its right side, and to a less extent on the left. This was indicated by the ease with which the probe could be passed into the cavity of the cyst without any obstruction in the directions just mentioned, whereas directed in any other course it apparently came at once in contact with the cyst wall.

It thus seemed most desirable that this vaginal opening should be made permanent to establish a free drainage from the cyst and to facilitate the washing of its interior with disinfecting solutions. The edges of the incised walls of the cyst and vagina were then united by silver wire sutures, after the method described [1] and first practiced by Noeggerath in cases of ovarian cysts.

The patient reacted well, and for two days was kept well under the influence of morphine administered hypodermically. By that time it was thought that union had occurred between the peritoneal surfaces immediately around the incision, and injections of carbolized water into the cavity of the cyst were begun and continued each two hours for nineteen days, the discharge being highly offensive in character, though slight in amount. For sixteen days she suffered from vomiting, diarrhœa, and symptoms of septicæmia, notwithstanding the frequency with which the cyst was washed out; and for twenty days subsequently, these symptoms subsiding, she gained in flesh and strength, and would have been allowed to be up had it not been for the temperature, which ranged from 100° to 102° F. much of the time. The temperature showed a variation of from two to three degrees nearly every day, but did not seem to be particularly affected by the injections into the cyst, although when discontinued for twenty hours, on the 29th of November, the temperature rose, and remained at a higher point (102.5° to 103° F.) for three days than it had reached for a week previously, showing that the frequent washing out of the cyst helped somewhat towards keeping the temperature within the limits indicated. The highest point indicated by the thermometer was 103.3° F. on the tenth day after the operation. The pulse was most of the time between 80 and 100 beats per minute, the highest registration being 115 on the fifth day.

During the first few days following the operation there was considerable abdominal tenderness, particularly over the right iliac region, and pain was nearly always complained of on introducing the long catheter through the vaginal opening into the cyst. The fluid returned from these washings was for a few days abundant in little caseous masses, but soon became but slightly opaque, though highly offensive, and during the latter part of the time somewhat purulent. No hairs were at any time discovered in these washings.

The diet for the first sixteen days consisted solely of milk and beef juice, and was then somewhat increased by eggs and toast, but she was unable to take house diet until the fortieth day after the operation. The medicines used were morphine, champagne, brandy, cinchonidia, and nitrate of pilocarpine. The morphine was employed only during the first few days, when peritonitis was feared. The pilocarpine, in doses of one sixth of a grain, was used on two occasions with good results. Both were given subcutaneously.

December 19th. The patient had gained exceedingly in flesh, and was feeling quite well, but had not been allowed to sit up because of the persistent high temperatures. On account of a severe surgical case under observation at that time, I felt it unwise to have charge of both cases, fearing the septic influences which might be conveyed, and had left the patient entirely to the house surgeon for the ten days immediately preceding the above date, simply hearing from him that she was comfortable and gaining in strength. At that time, however, she was put on the table for a more careful exploration of the cavity of the cyst, to determine, if possible, the cause of the continued elevation of the temperature. The finger detected a sponge-like mass, which, when pressed, caused a free discharge of thick pus from the vaginal opening. By aid of a tenaculum, a mass of hair, about the size of a goose's egg, was drawn down and with some difficulty removed by the vagina. The temperature began to fall almost immediately, and she was able to be up in four days afterwards. Having been taught to wash out the cyst, she was discharged from the hospital, relieved, January 14, 1879, with instructions to attend as an out-patient weekly for applications to the cavity of the cyst.

March 12th, or about two months later, she was readmitted to the hospital, there having appeared in the upper part of the vagina an exceedingly vascular-looking growth, evidently having its origin from the cyst wall, and projecting through the vaginal incision. The next day the patient was etherized, and this proliferation of the cyst wall removed with scissors, it being attached by two small pedicles not over one fourth of an inch in diameter. Its size was about that of a small hen's egg, and it was covered more or less thickly with hairs. The whole interior of the cyst, which was then not larger than the mass removed, was thor-

[1] American Journal of Obstetrics, May, 1869.

oroughly cauterized with the thermo-cautery. A more careful examination of the specimen removed was subsequently made by Dr. Cutler, and it was found to contain a piece of bone and two teeth.

There was no elevation of pulse or temperature following this last operation, and the patient was discharged, cured, so far as the dermoid cyst was concerned, to be readmitted at some future time for operation on the cervix uteri and perinæum. She was seen a few days ago, and there remained but the smallest cavity, the probe entering through the vaginal incision not more than half an inch in any direction.

In reviewing the case, there are some points of interest to be considered, among which may be mentioned that the evidences of adhesions present at the time of operation were not altogether borne out by the subsequent history; and the directions which the probe took to the extreme right and left sides of the cyst when evacuated might perhaps better be accounted for by the presence within of the mass of hair and the proliferation of the cyst wall, which were subsequently removed, and which, while there, prevented collapse of the cyst wall. This being the case, it might have been better originally to enlarge the vaginal incision and make a greater attempt to draw the whole cyst through it, making the operation that of vaginal ovariotomy rather than of evacuation and destruction of the cyst.

The fact also that the temperature was not more quickly affected by the washing out of the cyst is well accounted for by the presence of the mass of hair therein, which held in its meshes a large quantity of purulent fluid, which the injection was powerless thoroughly to remove, and which, remaining there, was continually draining from the hair as from a sponge, and, coming in contact with the cyst wall, tended constantly to keep up the septic influence.

In looking up the literature of the subject of evacuation and subsequent destruction of the cyst wall as a means of curing cases of dermoid cysts, I find comparatively little.

Dr. Peaslee, in his work on ovarian tumors, page 221, refers to a case in which the cyst, ruptured during parturition, discharged by the vagina, and, by the aid of antiseptic and astringent injections, became reduced to the size of a walnut; but as a part of its inner surface was true skin, he failed to destroy it entirely even by the use of caustics.

Dr. John Homans reported some years since in the Boston Medical and Surgical Journal a case of dermoid cyst evacuated through the rectum, in which the drainage of the cyst and its irrigation were accomplished through a catheter for a time, and subsequently through a tube inserted into the cyst, which was thus destroyed, and the patient made a good but rather slow recovery. The special point of interest which made it seem desirable to place on record the case which is the subject of this paper is the application of the method of evacuation and subsequent drainage recommended by Dr. Noeggerath in cases of ovarian tumors, but which was thought to be inapplicable in cases of dermoid

cyst on account of the inability to destroy the interior of the cyst. It seems probable, however, that the desired result has been accomplished by the thorough application of the actual cautery to the inner cyst wall, thereby substantiating the supposition of Dr. Peaslee, on page 221 of his work, that the operation of Noeggerath might be made applicable to cases of dermoid cyst of the ovary.

TWO CASES OF CHOREA IN THE KITTEN, WITH AUTOPSIES.

BY JAMES J. PUTNAM, M. D.

THROUGH the courtesy of Mr. D. G. Wilkins I have recently been able to examine the central nervous system of two kittens that almost from their birth had suffered from chorea of the most typical kind. Two others from the same litter had also had the disease, but had been killed. All four, as well as two more that were unaffected, were healthy-looking, well-developed, playful animals, as their mother had been before them. The symptoms were first noticed almost if not quite as soon as the movements of the little creatures began to attract attention at all, and rather increased than diminished in intensity with advancing age. No post-natal cause could be assigned, except that the cellar in which they were born was somewhat damp. The only respect in which the symptoms differed in any way from the classical symptoms of human chorea was that when the kittens (this was true at least of one of them) were held carefully in the arms and caressed, the involuntary movements sometimes ceased for a few minutes. Even the movements of choreic children, however, often diminish greatly under similar conditions. In connection with the least voluntary effort, even that of standing, the picture became characteristic and striking. An unseen tormentor seemed to be making sport of the little beasts. A leg on which one of them was standing, or which it was using in play, would be suddenly twitched a little to one side or backwards; or, while running forward, the animal would suddenly pause and balance backward, even falling on its haunches, as if pulled back by the tail; or it would be thrown suddenly on its side to the ground. The tail and the muscles of the face and of the whiskers were involved, and often the hair all over the body was more or less erected, giving the skin a tumbled look, as if the animal had recently received a ducking. The heart was not auscultated.

One of the animals was killed when about one month old, the other a few weeks later. In the case of the former the spinal cord was first divided, under ether, in the dorsal region, to see if the movements persisted, as Chauveau has said of the dog, for the parts behind the section.

The kitten was allowed to recover fully from the ether, and was shortly afterwards killed, no choreic movements having shown themselves, either spontaneously or in connection with the reflex contractions which were readily excited in the hind legs. Possibly they might have appeared had a longer time been allowed to elapse. The hearts of both kittens were carefully examined for endocarditis, but none was present. The cords and brains were hardened in Müller's fluid. Subsequent microscopic examination failed to reveal any abnormal changes in the brain, cerebellum, medulla oblongata, or cord of either case. It was not thought necessary to examine the entire specimen piecemeal; sections were made from many parts of the cord and brain, including the cerebral ganglia and parietal cortex and the cerebellum. In the younger kitten the blood-vessels were everywhere injected, often crowded with blood, but there was no trace of the escape of leucocytes, as described by Drs. Gowers and Sankey in their interesting paper upon the Pathological Anatomy of Canine Chorea.[1] It was thought possible that this injection, which was mainly confined to the capillaries and veins, had been due to the effects of the operation on the spinal cord, combined with the struggles of the animal at the moment of death, which was brought about by hyper-etherization in an air-tight jar.

The blood-vessels of the other kitten, however, which was killed in the same way, were not even injected, except slightly here and there, as under normal conditions. The ganglion cells in the spinal cord, as well as those in the brain, of the younger kitten — that in which the injection was observed — failed to imbibe the staining fluids, and even in glycerine they could not be satisfactorily studied. Nothing, however, could be more perfectly healthy to all appearance than the ganglion cells in the case of the second, the older kitten, both in all parts of the spinal cord, the medulla oblongata, the cerebellum, and the brain. Nothing suggesting embolism could be found in either case.

It is plain that the pathological lesion of animal as well as of human chorea, if, indeed, there is any single, characteristic lesion, has yet to be discovered. In one of the cases of Gowers and Sankey extensive changes were indeed present, in the form, mainly, of deposits or extravasations of lymphoid cells, widely disseminated through the central nervous system, and associated with alterations in the nerve elements. In this case, however, the symptoms, especially the presence of profound cutaneous anæsthesia, suggest that something more than simple chorea had been active as a cause. In the other case certain changes were seen in the ganglion cells of the cord, but their interpretation is made more difficult by the fact they were more widely disseminated than the distribution of the symptoms, which were confined to one fore leg, would seem to warrant.

[1] Medico-Chirurgical Transactions, vol. lx.

It is probable that we shall have to acquire more exact *a priori* notions respecting the physiology of the nervous centres, as, for example, through such researches as those of Hughlings Jackson, before we can succeed in turning these discrepant pathological observations to good account.

RECENT PROGRESS IN OPHTHALMOLOGY.

BY O. F. WADSWORTH, M. D.

Theory and Treatment of Glaucoma. — In an article on iridectomy and sclerotomy in glaucoma,[1] Mauthner put the question whether, in glaucoma simplex and chronic inflammatory glaucoma, when an individual is still capable of work, although central or peripheral vision, or both, have suffered severely, it is allowable to subject him to an operation (iridectomy) which may lead quickly to destruction of sight. He returns to the subject,[2] and answers the question in the negative, rejecting iridectomy absolutely in many cases in favor of sclerotomy. There is no attempt to support any theory of the action of sclerotomy; indeed, he avows that he understands the action of the one operation as little as of the other; but the opinion is based on his own experience, since he has not seen such bad results after sclerotomy as after iridectomy.

The immediate bad results after iridectomy may be attributed either to the disease itself, independently of the operation; to the optical effect of the operation, the coloboma causing a diminution of vision, specially marked when astigmatism, regular or irregular, existed previously or has been caused by the wound, incarceration of iris, etc.; or, finally, to a harmful effect of the operation on the course of the disease.

Of seventeen eyes affected with chronic glaucoma, mostly glaucoma simplex, and which possessed vision before operation, in only three was vision improved by iridectomy; in five it remained stationary, but in three of these only by the help of cylinder glasses or tattooing; while in eight it was lessened, and in five of these eight cases vision that had enabled the patients to work was rendered useless. In all the iridectomy was done upward. Nor did the decrease of vision depend on non-effect of the operation in reducing tension, for in only one of the cases tension remained high.

The poor results obtained from iridectomy led to the empirical trial of sclerotomy. There was sufficient encouragement in the facts that no satisfactory explanation of the benefit of excision of the iris has been given, and that many cases have been observed in which a very far from properly performed excision has sufficed to cure glaucoma, — even an excision only of a bit of the sphincter, or of the periphery with the

[1] Wiener med. Wochenschrift, 27–30, 1877.

[2] Archives of Ophthalmology and Otology, vii. 179.

sphincter left intact and with the section wholly in the cornea. The less prominent the inflammatory symptoms, the more necessary has complete removal of the iris up to the ciliary border been considered. Yet in that one of the seventeen cases of chronic glaucoma related by Mauthner in which vision was most improved by operation, a case absolutely without inflammatory symptoms or pain, on account of the unruly behavior of the patient only a small piece of the iris was removed, the sphincter remaining intact. From such facts it appears that excision of the iris is not necessary to cure glaucoma.

The sclerotomy advised follows closely that proposed by De Wecker: previous instillation of a one per cent. solution of eserine, puncture and counter-puncture with a Graefe's knife, as if for a scleral flap two mm. or more in height, the flap not to be completed, but a narrow bridge of sclera left in the centre. Nineteen cases of sclerotomy are given. The results were better than those obtained by iridectomy. Some of these cases were specially noteworthy because the defect of the field already had approached very closely the point of fixation. The hazardous sequences of iridectomy in such eyes Von Graefe long ago pointed out, but only for glaucoma in myopic eyes. Others, however, and Mauthner himself, had witnessed bad effects follow iridectomy when such defect of the field existed in eyes not myopic.

Iridectomy should be unconditionally replaced by sclerotomy in (1) the so-called prodromal stages of glaucoma, that is, where between the inflammatory attacks the function is intact; (2) glaucoma simplex, with central and peripheral vision almost normal; (3) chronic glaucoma, where the defect of the field has approached very near the point of fixation, even if from one side only; (4) hydrophthalmus; (5) certain forms of secondary glaucoma. The single case of sclerotomy in acute glaucoma given shows that this operation may be practicable and efficient here also.

In a later paper[1] Mauthner discusses the symptoms and nature of glaucoma. He takes strong ground against the theory that increased tension is the cause of the excavation of the disc, or that this is a necessary accompaniment of glaucoma. The rule is that excavation is wanting in glaucoma hæmorrhagicum, where increase of tension reaches its highest degree; it is hardly to be expected at the beginning of acute glaucoma; but also in simple and chronic inflammatory glaucoma the evidence of Von Graefe, Mooren, Schweigger, and cases of his own show that it may be absent, spite of persistent increased pressure. To invoke an increased resistance of the lamina cribosa in explanation of such cases is a pure assumption, unsupported by any proof. If pressure alone were the cause, many symptoms of excavation ought to be found at the entrance of the optic nerve, even if the lamina cribosa did not

[1] Archives of Ophthalmology, viii. 1.

yield. Moreover, when the beginning of excavation is seen, pressure is frequently not increased.

Unfortunately, no eye has been examined anatomically in which a typical excavation had been demonstrated by the ophthalmoscope, and the function of the eye, even in diminished degree, had been preserved. But all anatomical examinations of glaucomatous eyes in which the layer of nerve fibres has been preserved give, although the lamina cribosa has yielded, only the picture of a partial funnel-shaped depression. So long as the function is preserved Mauthner believes that the ophthalmoscopic appearance of a depression reaching to the edge of the nerve is deceptive. He supposes that a morbid process causes diminished power of resistance in the lamina cribosa, and at the same time softening and absorption of the connective tissue of the papilla, and this allows the vessels to sink back into the head of the nerve, and appear as if pressed against the sclera. Meanwhile, the transparent nerve fibres retain their function, but are invisible. In support of the theory of an inflammatory condition about the disc are the convolutions of fine vessels sometimes seen at the bottom of an excavation, and which are to be regarded as new formations, the new-formed tissue occasionally covering the floor of old excavations, and the peculiar yellowish "glaucomatous ring" around the disc, due without doubt to exudation. But the chief objection to the view that the glaucomatous excavation is due to pressure is found in the consideration of the functional disturbances. The great differences in the amount of the amblyopia and the extent and position of the defect in the field are inconsistent with the idea of an interruption of the conductibility of the nerve fibres by pressure. Especially is this the case when, with precisely similar excavations in the eyes of the same person, the vision of the two eyes shows the greatest contrast. Nor is there more in favor of the interruption of the blood current. Though this might be regarded as an important element in certain cases of acute glaucoma, it would certainly be out of the question in glaucoma simplex, where abnormal tension is frequently slight or doubtful, arterial pulsation is generally absent, and the usual distribution of vessels in the periphery of the retina may be seen. The affection of the sense of light, which is usually diminished in developed glaucoma, and even may be an early symptom, points to a disturbance from the choroid of the perceptive elements of the retina rather than to interference with the nerve-fibre layer. So the comparative preservation of the perception of color is against atrophy of the nerve fibres. Finally, there are cases in which after pressure has been reduced to the normal by iridectomy vision declines abruptly, and others in which glaucoma is cured, as it seems permanently, by iridectomy, while tension remains high.

In opposition to Schnabel,[1] Mauthner holds that in acute glaucoma

[1] Journal, xcvii. 550.

there is inflammation of cornea and iris. Certain symptoms, enlargement of ciliary veins, anæsthesia of cornea, shallowness of anterior chamber, widening and immobility of pupil, *may* be due to pressure, as are certainly the pupillary symptoms which disappear after sclerotomy. But these do not indicate the nature of the glaucomatous process, since they are all absent in true glaucoma simplex. Indeed, many processes beginning with great increase of pressure and the usual accompanying symptoms observed in cornea and iris are very different from glaucoma, and among these is to be placed glaucoma hæmorrhagicum.

Glaucoma is a choroiditis, often complicated with inflammatory symptoms in the anterior segment of the globe, starting in various parts of the choroid, and thus affecting the retina at various points, commencing as a rule, with increase of tension, but also progressing without this, and causing, though not always, the development of an affection of the optic nerve. The great differences which exist in the symptoms depend upon the situation, extent, intensity, and course of the disease. The functional disturbance is caused by injury done by the choroiditis to the perceptive (posterior) elements of the retina. Increase of tension and involvement of the optic nerve may hasten but are not the cause or beginning of blindness. This ensues with marked excavation even without pressure, or with increased pressure without excavation, and it follows that there must be real glaucomatous processes which lead to blindness without either increase of pressure or excavation.

The morbid process in question cannot be remotely connected with choroiditis serosa; it does not at first lead to remarkable alterations, at least in the fundus of the eye, but an indication of it is to be seen in the delicate alterations of the pigment epithelium. Atrophy of the choroid and of the ciliary muscle, which have often been proven by the microscope, are the result, not the cause, of the process.

Vision and Color Sense of the Nubians. — In the absence of exact information it has been generally assumed that uncivilized races possess excellent vision. The result of examination of eleven Nubians by Cohn [1] goes to support this assumption. Two were women; of these one had but little better vision than that taken as the normal standard for Europeans. The other woman and all the men had about double the normal vision; one considerably more than this, even. One only, a priest, who had studied Arabic for nine years and read much, was myopic (1.5 D); he had formerly seen well in the distance. This man furnishes an example of acquired myopia where there is no reason for supposing any hereditary tendency.

The examination of the color sense of these people is interesting from its bearing on the controversy which has existed the past few years as to whether the ancients were partially color-blind. As is known, Glad-

[1] Centralblatt für Augenheilkunde, 1879, page 197.

stone, Magnus, and others have insisted that the Greeks and other nations were color-blind, from the fact that they had but few words to express color, and employed the same word to denote different colors. The Nubians were found to have but few words denoting colors, and for some colors used two or three words indifferently, while for green and blue they used the same word. Holmgren's worsteds, however, they sorted with the greatest accuracy, showing plainly that only the means of verbal expression was lacking, but their color sense was quite equal to the standard of modern civilization. The same state of things was observed by Virchow in some other Nubians in Berlin; and he also in the case of eight Laplanders[1] found imperfect verbal distinction of color with perfect color sense. Dr. Alenquist,[2] it appears, further, found in the people living at the east cape of Siberia a color sense like that of Europeans.

PROCEEDINGS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

E. G. CUTLER, M. D., SECRETARY.

DECEMBER 23, 1878. *Stricture of the Œsophagus.* — DR. HODGES showed a specimen of stricture of the œsophagus of many years' standing and related the case. The patient died at the age of eighty-three, and from her seventeenth year had been unable to swallow solid food. She was at one time a patient of Mr. Abernethy, also of Dr. J. C. Warren and Dr. James Jackson, all of whom at different times for long periods used to pass œsophageal bougies. For many years the patient had had little treatment locally, however, till within two years, when Dr. Hodges persuaded her to allow him to pass the œsophageal bougie. One of the smallest size was passed first without difficulty, next a medium-sized one, and lastly the largest one, which latter caused considerable pain, and was followed by a mouthful of blood. The patient then ate and swallowed as well as anybody for nearly two years, until within a few weeks, when she commenced to regurgitate food, and gradually failed, with vomiting her food. At the autopsy, performed by Dr. E. G. Cutler, there was found to be a cicatricial stricture of the œsophagus at the commencement of the organ just behind the cricoid cartilage. Cancer was also found at the lower end of the œsophagus, covering a space an inch and a half in diameter; it was ulcerated, and had produced a slight diminution of the calibre. The other organs were not diseased. — In commenting on the case, DR. JACKSON said that he had never seen a specimen of simple stricture of the œsophagus but once before. In all the others there had been malignant disease of the same.

Leprosy. — DR. WHITE, having collected many facts in regard to leprosy in the United States, gave a brief *résumé* of the subject. A full report will appear in the proceedings of another society.

Probable Acute Nephritis. — DR. ELLIS reported the case as follows: —

[1] Centralblatt für Augenheilkunde, 1879, page 275. [2] Idem.

A woman sixty-six years old, who had always enjoyed good health, was attacked in the latter part of November with severe coryza, followed by inflammation of the middle ear, for which Dr. C. J. Blake punctured the drum. The operation was followed by a discharge of pus, and after a time by relief. On December 4th there was nausea and vomiting, which persisted on the 5th, when there was so much debility that Dr. Blake advised the family to send for me. The patient when first seen lay on the outside of the bed, dressed, evidently feeble, but no symptoms were mentioned, except the nausea and vomiting, which were the only evidence of disturbance of the stomach. The pulse was 104. The temperature was 103° F. She was ordered to take quinine and brandy, with small quantities of strong beef tea frequently repeated. On the following morning, the 6th, she was in bed, in a peculiar apathetic state, though conscious and smiling on being spoken to. She articulated with great difficulty, but at times distinctly, giving directions about certain matters which interested her before she took to her bed. She had vomited but once. The pulse was strong and regular. There was some flushing of the face, attributable apparently to the stimulants. During the day she vomited four or five times and had three loose dejections. That night she slept sufficiently well, waking to take nourishment, which was still given in small quantities. In the morning of the 7th she seemed a little brighter, but there was the same look of apathy and the same difficulty in articulating. The pulse was 88. The temperature 102.5° F. During the day she had six loose yellow dejections, in the evening involuntary. These attracted attention, as early in the case it was ascertained that a broken drain in the cellar had allowed the escape of gas into the house. but no rose spots were found, nor other signs of abdominal disease. On the morning of the 8th she was seen in consultation by Dr. Minot. The apathy was more marked; the pupils were considerably dilated and quite sluggish on exposure to light. The pulse was 96, and the temperature 103° F. Towards the middle of the day the pulse increased in rapidity, and at half past five P. M. it was 128, while the temperature fell to 101½° F. There was apparently less consciousness, though she still seemed to recognize those about her. The respiration had gradually increased in frequency, and at this time was 52. Soon after the patient was first seen the kidneys were suspected as a possible cause of the vomiting, and the urine was asked for, but none could be obtained until the evening of the 7th. This was examined by Dr. E. G. Cutler, with the following result: The reaction was acid. The urea, chlorides, and earthy phosphates were normal. Considerable albumen was found. Under the microscope there was a large number of pus corpuscles and flat epithelium cells, coarsely and finely granular and hyaline casts in large numbers, and some round epithelium, probably renal. This information was obtained at noon on the 8th. From this time the pulse and respiration became more and more rapid; she was drowsy, but at six P. M. recognized and kissed her little grandson. She continued to take nourishment till the morning of the 9th; at this time the face and both feet were œdematous, but nothing of the kind had been noticed before, though attention had been paid to the point. At eight A. M. the pulse was hardly perceptible, and she died at half past nine. The expression of the face, though generally dull and indifferent, would change to a smile when she was spoken to. Nothing like coma was noticed until near the end. There was at no time pain in the head or paralysis, except, perhaps, a slight doubtful deviation of the mouth during the last day of her life. The lungs were examined a number of times without any signs of disease being found. The disturbance of the cerebral functions excited the closest scrutiny, as the otitis suggested the possibility of meningitis, but the symptoms were not such as to warrant the diagnosis of the latter. The examination of the urine furnished unquestionable evidence of renal disease, and nothing in the previous history of the case pointed to a chronic affection. A positive structural change of the kidneys was not demonstrated by an autopsy, but the albumen casts, troublesome nausea, and the œdema at the close make it probable that this was one of the insidious cases of acute nephritis, of which but few have been reported. The great importance of calling attention to such is a sufficient reason for publishing this, though imperfect and far from conclusive.

Abdominal Tumor. — Dr. J. Homans reported the operation, which was an exploratory incision five inches long into the abdominal sac under the carbolic spray. Forty pounds of ascitic fluid were let out, and a solid lobulated

tumor was found attached very firmly to the sacrum, ileum, and uterus. Nothing further was attempted, and the wound was closed in the usual manner, and the antiseptic dressing was applied. Union was by first intention, no pain or tenderness was felt, and no opiate was required. The stitches were removed the fifth day, and the patient did well.

Abscess of the Liver. — Dr. Knight reported the case. The sickness began in January, 1878, with pain in the right lumbar region, followed by pain in the shoulder and arm, which continued. In May, pain in the nipple and right shoulder-blade came on, so severe that the patient had to be carried home; in a week, however, he got out. The 10th of June, one month later, he commenced to cough up large amounts of bloody pus; this continued till last September, when he was seen by Dr. Knight. The pus was submitted to Dr. E. G. Cutler for microscopic examination, and he discovered unequivocal hepatic cells in it after a long and most careful search. On the supposition that he had disease of the lung, he had been riding horseback and exercising. Complete rest caused immediate improvement, and in five weeks he was perfectly well. Dr. Knight referred to a very good article in a recent number of the *New York Medical Journal* on Abscess of the Liver, by Dr. Davis.

Anchylosis of the Vertebræ following Gonorrhœal Rheumatism. — Dr. Bradford reported the case. The patient, thirty years old, of healthy appearance, had gonorrhœa several times, each attack being followed by rheumatism, which, however, was not severe, until after the last attack of gonorrhœa, three years ago. At this time there was a severe rheumatic affection of each knee. The knees were flexed and held stiff, and remained so for six months. The back soon became rigid and painful. The patient was bedridden for some time, but subsequently became able to go about. On examination, his back was found arched considerably, so that he appeared quite round-shouldered and bent forward. The spine was perfectly inflexible, there being no motion from the seventh cervical vertebra to the sacrum. In stooping, all motion was at the hip-joints, the back moving as if the spine from the seventh cervical to the sacrum was one bone. The chest could not be expanded, the ribs being anchylosed with the vertebræ. The breathing was therefore diaphragmatic. No one vertebra projected; there was no pain or tenderness, though the patient complained of stiffness in his back, and pain if he attempted to lift a heavy weight. He was unable to carry anything very heavy. There was no stiffness in the knees or in any of the other joints. The patient was able to work.

KLEIN AND SMITH'S HISTOLOGY.[1]

Among the merits of this excellent work we must not forget to place the punctuality with which it appears. Three numbers have come out since our last notice. Part VI. is devoted to the spinal cord, the optic nerve, and the brain. Klein's remarks on the neuroglia of the cord deserve to be transcribed almost without abbreviation. "The chief part of the frame-work is a semifluid

[1] *Atlas of Histology.* By E. Klein, M. D., and E. Noble Smith, L. R. C. P. Parts VI., VII., and VIII. Philadelphia: J. B. Lippincott & Co. 1879.

substance (neuroglia matrix), which under certain reagents (chromates) presents a granular aspect, but in the fresh state and with other reagents is quite homogeneous. This substance fills all the interstices between the nervous elements of the cord.

"In this homogeneous matrix are imbedded very numerous fibrils, neuroglia fibrils, which anastomose with one another in a net-work. These fibrils are in chemical respects similar to elastic fibrils, although they are not so resistent against acids and alkalies.

"In connection with the network of neuroglia fibrils we find flattened, branched, nucleated connective-tissue corpuscles; the processes of these lose themselves amongst the former.

"Neuroglia matrix, neuroglia fibrils, and branched cells form the 'neuroglia.' These three substances have a definite relation to one another: the greater the amount of one, the greater is also that of the other two."

The discussion of the relations of the nerve cells in the gray matter of the cord is very interesting, but we are not aware that it contains anything new. The article on the optic nerve is valuable chiefly on account of the description of lymph spaces between the sheaths, a knowledge of which is of great importance to students of the eye. We are sorry to find nothing on the vexed question of the decussation of the fibres in the chiasma. The brain is treated more fully than we should expect in a work of this nature. The writer generally follows Meynert. Part VII. is also very interesting; containing remarks on the ganglia of the cerebro-spinal and sympathetic systems, and on the terminations of nerves. The illustrations are admirable; especially those of the ganglion cells, some of which have the spiral fibre, and of the nerves of the cornea. We cannot, in this place, help repeating an expression of regret that the authors say next to nothing of the methods employed. The nerves of unstriped muscle are traced to a fine net-work between the cells, and their further course is left undecided. It is thought not improbable that they end in the nuclei, but not in the nucleoli, as some have maintained. In voluntary muscle the nerve is traced into the muscular fibre at the end plate, and its absolute termination is also left in doubt. Part VIII. is devoted to the vascular system, including capillaries, arteries, veins, and the heart. No special comment is necessary, unless it be in praise of the section on the development of blood-vessels. This part contains also an account of the lymphatic glands.

The work more than fulfills its original promise. It is the finest of the kind that we know. T. D.

HYGIENE AND PUBLIC HEALTH.[1]

THE first volume of the series of Ziemssen's Cyclopædia relating to the subject of public health was omitted from the American translation, and this decision, as the editor informs us, was based chiefly on the fact "that the book, though excellent in all other respects, treats the subject almost entirely from a German stand-point, and takes cognizance of a state of things very materially

[1] *A Treatise on Hygiene and Public Health.* Edited by ALBERT H. BUCK, M. D., American Editor of Ziemssen's Cyclopædia of the Practice of Medicine, etc., etc. Two volumes. New York: William Wood & Co. 1879.

different from that which exists in this country. It was believed, however, that a treatise on private and public hygiene, written with special reference to the different climates, conditions of soil, habitations, modes of life, and laws of the United States, would meet with favor, not only among the subscribers to Ziemssen's Cyclopædia and physicians generally, but also among all educated classes." These sentences give clearly enough the *raison d'être*, the aim, and scope of this work, which presents itself in two handsome volumes of about eight hundred and six hundred and fifty pages respectively. The first volume is begun by an able introduction from the pen of Dr. John S. Billings, of Washington, the larger part of which is devoted to the Jurisprudence of Hygiene, under which head are discussed the formation and functions of boards of health, systems of quarantine, and kindred important subjects. The volume is divided into Part First, which treats of Individual Hygiene, and Part Second, which treats of Habitations. Under Individual Hygiene are articles on Infant Hygiene, Food and Drink, Drinking Water and Public Water Supplies, Physical Exercise, and the Care of the Person. Under Habitations we have articles on Soil and Water, the Atmosphere, and General Principles of Hospital Construction.

The second volume is also divided into two parts, the first being devoted to Occupation, and the second to Public Health. Occupation is dealt with in five different papers, on the Hygiene of Occupation, the Hygiene of Camps, the Hygiene of the Naval and Merchant Marine, Hygiene of Coal Mines, and the Hygiene of Metal Mines.

Public Health, which forms Part Second, is developed in eleven papers, among which are two articles on Quarantine, one treating the subject exclusively as relating to sea-port towns, and the other to Inland Quarantine. These articles are both worthy of attention at the present time, but the former especially so, as embodying the conclusions of Dr. Vanderpoel, the very efficient health officer of the port of New York.

The names of the editor and of the majority of the contributors, who are drawn from various parts of the country, are a sufficient guaranty of the excellence of this work, the scope of which we have thought we could best exhibit to our readers by giving the titles of the subjects discussed.

The latest accepted theories and conclusions are embodied in the treatment of the various subjects, but in regard to many of these our knowledge is still in its earliest infancy; what is accepted to-day is doubted to-morrow, and rejected the next day, as it were. The eager labor and thought of so many keen minds as are now devoting their energies to these important topics cannot fail to make necessary within a short time a new edition of the work, and even the rewriting of some of the articles, good as they now are.

DOWSE ON SYPHILIS OF THE BRAIN AND SPINAL CORD.[1]

A TITLE-PAGE, largely devoted to the titles of the writer, and a dedication to Wm. A. Hammond, M. D., introduce us to a cheap-looking volume, the material composition of which reflects no credit upon the house by which it is pub-

[1] *Dowse on Syphilis of the Brain and Spinal Cord.* By THOMAS STRETCH DOWSE, M. D., etc., etc. New York: G. P. Putnam's Sons. 1879. Octavo, cloth. Pp. 142.

lished. The preface, however, is concise and sensible. The style of the writer is quaintly mediæval, often confused and involved, and frequently not in accord with grammatical rules. The cases quoted show, on the other hand, careful observation and extended experience; and certain conclusions, possibly erroneous, seem to arise more especially from illogical induction. The original wood-cuts and Woodbury-types which illustrate the book are of inferior quality, while some excellent chromo-lithographs are not original. Good indexes to subjects and cases conclude the work, though an extensive bibliography of the literary productions of the author upon all subjects might well have been omitted. The treatise is subdivided into chapters devoted respectively to History and Nature, Diagnosis, Treatment, Pathology, with two quite readable chapters upon Hereditary Syphilis and Syphilitic Epilepsy. The chapter on History and Nature contains nothing new. Its nomenclature also is not strictly correct, neither a "psoriatic syphilis" nor a "syphilitic psoriasis" existing in nature any more than a bovine horse, or an equine, — call it bull, not ox. Under Diagnosis, the writer calls attention to "cerebral syphilis, where the exciting cause has been venereal excesses, over-study, mental anxiety, worry, and even fright." Dr. Dowse's views on treatment are sound and judicious, except that he apparently recommends constitutional treatment when nothing but the primary lesion is present, — a course disapproved of at present by the best authorities. He lays stress upon the absolute necessity of a thorough mercurial course in the early stages of the disease, "for an incomplete, hesitating treatment of external syphilis specially predisposes to subsequent affections of the nervous system." Under Pathology, we note that "in over one thousand cases of post-mortem examinations of the brain it was noticeable in how small a number the disease appeared to originate in the under layer of the periosteum of the endocranium."

BROWN'S AIDS TO ANATOMY.[1]

We are unwilling to give praise to short cuts to knowledge, and such is certainly the little work before us. On the other hand, there is a good deal about it that we like. If it be used as it should be, that is as a guide to dissection and study, we think it may be very useful. It is largely devoted to the relation of parts in important regions.

TRANSACTIONS OF THE NEW YORK OBSTETRICAL SOCIETY.[2]

The transactions of this society have appeared from time to time in the *American Journal of Obstetrics*. The present volume is a reprint from that journal, and the result is a collection under one cover of a number of valuable papers and interesting discussions which have heretofore existed only in the pages of a quarterly journal. A list of the Fellows of the society from its foundation has also been added.

[1] *Aids to Anatomy*. By George Brown, M. R. C. S. Fourth Thousand. New York: G. P. Putnam's Sons. 1879.

[2] *Transactions of the New York Obstetrical Society for the Years* 1876, 1877, *and* 1878 Vol. i. Pp. 500.

DR. LYON PLAYFAIR ON PUBLIC HEALTH.

The management of the Lowell Institute, with that active and judicious regard for its instruction to which the public of Boston has grown accustomed, secured for us the advantages of two lectures from Dr. Lyon Playfair, of England, during his recent sojourn amongst us. Both of these lectures were of much interest in their respective fields. The subject of the first was the Inosculation of the Arts and Sciences, and in this our learned visitor endeavored, as far as was possible in the short time allowed him, to bring before his audience the true relations and interdependence of the arts and sciences, emphasizing the fact "that in reality the arts is one of the parents of the sciences," and reminding his hearers that the expression "Science is the mother of the arts," which we are accustomed to use and to hear, took its rise in a late and developed state of the arts. Science was defined as "the accumulated conceptions resulting from the effect of reason upon the observations made upon the arts; and these conceptions of nature are what we term science." Occasion was taken to pay a well-merited compliment to our Institute of Technology. It is, however, with the second lecture, upon the Public Health, that we are more immediately concerned. Public health as exhibited in past and present social conditions and surroundings was used as a forcible illustration of the speaker's previous position, to show "how experience leads to science, and how science when produced throws much light upon the arts which experience has produced."

We hardly need any reminder of Dr. Playfair's eminent right and fitness to speak with authority and to command attention in regard to hygiene. An early technical training as a student and teacher of chemistry, and a subsequent constant connection in one form or another with sanitary legislation in Great Britain, since its early development in a royal commission, appointed by Sir Robert Peel to examine into the causes of death in the great towns and populous districts of England, down to the present time, present him to us, indeed, as a veteran, an enthusiastic, and, at the same time, an intelligent sanitary reformer. From the lips of such an apostle professional men are always glad to receive afresh the gospel of public health, and it is fortunate for the laity at large when such a one feels the inspiration to become an evangelist. It would seem hardly possible that the most indifferent or ignorant should refuse interest and coöperation when the whole law and gospel of hygiene is summed up in the short command, "Wash and be clean," but a glance at the irregular progress and even positive retrogression in the culture of public and private health, as exemplified by a short review of various peoples and countries at different periods, quickly calms any too enthusiastic hopes. It is almost discouraging when we reflect how much filth and how many bad smells have flourished with impunity since Ulysses gave scientific directions for the purging and disinfection of his house after the slaughter of his wife's admirers, — directions which for simplicity and thoroughness could hardly be improved upon. Still progress is made; the Elizabethan nastinesses have certainly been left far behind, and we have even reached the point where the first requisite for a habitation is not that it should be vast, impressive, or even beautiful, but well

drained. This is something, though Dr. B. W. Richardson's ideal sanitary city may be still in the distant future.

We are glad Dr. Playfair took occasion to say a word to his hearers about the burial of the dead, and to recommend the light, open wicker-work baskets to their mortuary consideration. Cremation certainly may be difficult of application for our very large cities, and the wicker-work, with its quick reduction and comparatively slight shock to the sensibilities, resulting from long custom, offers a happy compromise between our present mode of burial and cremation.

It is not easy to wean people from long-established prejudices touching such subjects, nor do we underestimate the opposition of those who are interested in the continued use of the present ponderous and unhygienic coffins and caskets. We chanced to be in London a number of years ago when the use of wicker-work for burials was first suggested. This reform was strongly advocated by a medical man, the friend of a well-known duke. The noble lord gave a garden party, to which the fashionable world was bidden that it might inspect various styles of basket coffins, and become impressed with their advantages. The guild of undertakers was greatly agitated; but even such an impulse did not change the fashion, and we continue to sacrifice reason to prejudice and to be buried as were our forefathers. Dr. Playfair is so full of his subject that we could have wished there had been time, after bringing the old dispensation of public health so happily before us, to treat at some length of the new dispensation, and this we hope is only postponed for another visit, when even his gentle remonstrance with our drainage and our river will be unnecessary. Of sound sense in a really interesting and popular form on matters pertaining to the public health we cannot have too much.

THE CONFERENCE OF HEALTH BOARDS AT NASHVILLE.

We take great pleasure in calling attention to the circular of the National Board of Health, which we publish to-day, and in urging all persons interested in sanitary science to benefit, if possible, by the opportunity of being present at the Nashville meeting. The Boston Board of Health will send a delegate, and we hope every other in the State will do the same. The secretary of the State Board will also go. So far as the National Board of Health is concerned, the immediate object of the proposed conference is to assist them in getting the views of sanitarians with reference to the permanent organization of the board, and their relation to state and municipal boards. It is not proper that we should anticipate the final report to Congress upon this subject, or give our views in detail upon a matter with which we have so little familiarity as maritime and inland quarantine; but we do desire to add our testimony to the great value of the work which has been already done by the National Board of Health, and to repeat the opinion, which we have already expressed, that the money which they have expended is the merest trifle in comparison with the good that has come from it in preventing a general epidemic of yellow fever. Doubtless, the organization of the board is far from perfect, but we

are not familiar enough with its operations to suggest what changes might be made to advantage, and we are satisfied to judge them by what they have done, and by their plans for the future.

First, as to what they have done. They have "boxed up" yellow fever in Memphis, this year, and have "stamped it out" in several places where it threatened to make its epidemic appearance. They are making careful investigations, under competent persons, into the causes of yellow fever in Cuba, and the means of preventing its importation into the United States; the best method of determining impurities in the air; the use of disinfectants with reference to the destruction of the "germs" of disease; the composition and merits of patent disinfectants; the prevalence of adulteration in food and drugs; the diseases of food producing animals in this country; the character of water supplies in relation to yellow fever; the size, grade, and efficiency of sewers in various cities; beside a sanitary survey of the New Jersey shore bordering on New York harbor, a digest of the statutes and decisions of the courts on points involving questions of public hygiene, a collection of opinions of prominent sanitarians and boards of health as to the proper form of a permanent national health and quarantine organization, and an inquiry into the condition of the mercantile marine for the purpose of suggesting legislation to protect the health of sailors. A most important undertaking is their house-to-house examination of Memphis, to prepare for a thorough report upon its sanitary condition, by which they hope to suggest measures to make yellow fever a thing of the past in that ill-fated city. The *National Board of Health Bulletin* is looked for each week all over the country as containing important information to be got nowhere else.

Having said this much with regard to the work of a board that has been in existence less than three quarters of a year, we purpose letting our readers have a chance to breathe before speaking of a future abounding in such vast plans. That there will be a future of great usefulness to the country and the world no reasonable man can doubt. In the mean time, let no one who can do so fail to avail himself of the extremely generous facilities offered by the Southern railroads to make the Nashville meeting a large one.

MEDICAL NOTES.

— In strong contrast with his advocacy of chloroform in his controversy with this JOURNAL, in 1870, the editor of the *British Medical Journal* now says (October 25, 1879, page 667), "The reasons why chloroform is considered the best anæsthetic, in the face of the numerous fatalities which attend it, and the reputed greater safety of ether, are not apparent on the surface." *Innominatus*, who bore the brunt of the controversy alluded to, congratulates the profession on this important accession to the cause of science and humanity.

— Dr. E. S. Gaillard, editor of the *Richmond and Louisville Medical Journal* and the *American Medical Biweekly*, has severed his connection with the Louisville Medical College, and removed to New York, in which city he will continue the publication of his live journals. — Dr. Ritter von Riedel heretofore assistant in Professor Späth's clinic, has been appointed body-physician to

the future queen of Spain. — Dr. Dévergie, the distinguished French authority in medical jurisprudence, and writer of a famous work on forensic medicine, is dead.

— The French minister of war has authorized the wearing of spectacles by soldiers on duty, subject to certificates of their necessity, which must be obtained from military surgeons.

— A singular case of "explosion of the scrotum" was recently reported in a Madrid medical journal, and is reproduced in the last number of *Hayem's Journal*. The patient, a forester, somewhat advanced in years, had for two months suffered from an inflammatory affection of the scrotum, attended with considerable swelling, but with little pain or general disturbance. One fine day, as he was seated upon the ground in the forest, with his gun lying by his side, he was startled by a loud detonation. He at first thought his gun had gone off. A glance at the exposed genitals showed that here was the seat of the disaster. The scrotum had burst, and the testes were laid bare. The patient made a good recovery.

This case seems to illustrate the danger of exposing a gangrenous and emphysematous scrotum to the full force of the sun's rays, without heeding the rapidly progressing inflation, which the most elementary knowledge of physics would teach one to expect, according to the principle of the Montgolfier balloon. If any by-standers had been present, as was fortunately not the case, the consequences of the patient's heedless behavior might have been most deplorable.

PHILADELPHIA.

— Professor J. Aitken Meigs, Professor of Physiology and Institutes of Medicine in the Jefferson Medical College, died November 9th at his residence, after a few days' illness. He was in his fiftieth year.

— A death of a child, three years of age, by carbolic acid poisoning was recently investigated by the coroner. Some commercial carbolic acid having been placed in a saucer under a sofa, with the view of driving away moths the infant, in crawling on the floor, found the saucer, and drank some of the poison. Its cries at once attracted the mother's attention, who noticed the stains on the child's face and hands. Medical aid was summoned, but the child almost immediately became collapsed and unconscious, with entire relaxation of the muscular system, weak pulse, and complete inability to swallow. The mouth, throat, chest, and hands were discolored by the acid. Death ensued in seven hours after the accident.

— The English *Veterinary Journal* reports that a staff cook having left some pounds of tea in a sack, a Kaffir groom filled it with corn, and, serving out the contents to a troop of horses, gave Lord William Beresford's charger the bulk of the tea, which was eaten greedily, and produced the most startling results. The animal plunged and kicked and ran backwards, at intervals galloping madly around, finally falling into a donga, where it lay dashing its head on the rocks, and was dispatched by an assegai thrust through the heart. The post-mortem appearances indicate extreme cerebral congestion. The phenomena exhibited were characteristic of the action of caffeine, namely, cerebral excitement, with partial loss of sensibility, convulsion, and death.

SURGICAL CASES AT THE CHILDREN'S HOSPITAL.

SERVICE OF DR. BRADFORD.

[REPORTED BY MR. H. COE.]

Caries of Patella; Purulent Synovitis; Incision into Joint; Death from Shock. — J. C., aged three, was brought to hospital by the Society for Prevention of Cruelty to Children, with a report that a few months before he had fallen and sustained an injury to the knee. At time of entrance the left knee was swollen, with but little tenderness and no heat. Femur not enlarged; tibia on palpation appeared somewhat thickened, with slight tenderness on pressure over the head of tibia; patella quite movable; leg held slightly flexed; sinus just below the patella over the tubercle of the tibia discharging a serous fluid. A ham splint was applied, and the child kept in bed. A month later the aspirator was used, the needle being inserted directly into the joint in two places. A few drops of serous fluid only were aspirated. The aspiration was not followed by any bad result, not even the elevation of temperature a single degree. A week later a probe was introduced into the sinus, which was found to lead directly down upon the ligamentum patellæ. This track was enlarged, and the sinus found to lead upward to the centre of the patella, and thence downward directly through the patella into the knee-joint, so that a probe passed readily into the joint. It was inferred that a purulent synovitis must exist. An incision was made on both sides of the patella, and two ounces of thick pus were evacuated. A drainage-tube was inserted, and the joint washed out by a solution of carbolic acid, one to forty. The whole operation was done under spray, and the wound dressed with a thorough antiseptic dressing. The child rallied from the operation, though not well, and died twelve hours later with symptoms of shock. On examination it was found that the bones and cartilages of the knee-joint were perfectly sound except the patella, which was perforated by a carious process most extensive on the outer side. The bone was not enlarged. The synovial membrane of the joint was thickened and covered with granulations; the periarticular tissue was thickened and somewhat infiltrated.

The patella was deposited in the Warren Museum.

Wound of Scrotum; Consecutive Abscess of Abdomen; Foreign Body. — F. M., aged seven, fell from a tree, sustaining during the fall a slight punctured wound of the scrotum. Three days after the accident there was a small fluctuating tumor in the right groin, and hernia was suspected. This proved to be an abscess, pointing in the scrotum near the site of the original wound. The abscess was incised in the scrotum, and the child was referred to the hospital by Dr. C. P. Putnam and Dr. J. F. Bush. On entrance a portion of the lower abdominal region was found to be red, hard, and tender directly over the bladder and to the right of the median line. No fluctuation. There was considerable fever; evening temperature 101.5° F., rising the next evening to 103.5° F. The patient complained of pain in the abdomen. The temperature soon fell to normal. The sinus in the scrotum discharged one to two ounces of pus daily. Urine normal. A poultice was applied to the abdomen, and a fortnight after entrance there was marked superficial fluctuation over the ves-

ical region. This was incised, and a few ounces of pus were evacuated. On the next day a piece of cloth of the size of a three-cent piece was removed from the incision into the abscess. This was found to be a small piece of cloth from the trousers worn by the boy at the time of the accident, which had worked up from the scrotum, and had caused the inflammation and abscess of the abdominal wall. The incision and sinus healed rapidly.

Vegetations of Vulva. — M. S., aged five. Patient referred to the hospital by Dr. C. P. Putnam, who a month before had removed a mass of papillary vegetations around the clitoris. These had returned, and at the time of entrance the whole clitoris was involved in a papillary growth of the size of a small walnut; the growth extended to upper surface of the labia majora and portions of the labia minora. The growth presented the ordinary appearance of venereal warts (papilloma). The whole mass was removed by the scissors, and strong nitric acid was applied to the base. The surface healed readily. Two months later no recurrence had taken place. The case is unusual on account of the age of the patient.

Fracture of Thigh. — Case I. G. S., eighteen months, referred to the hospital by Dr. Holyoke, fell from a chair. Several hours later it was noticed that he could not move the left leg. Fracture of the thigh was recognized, and the child was sent to the hospital. The fracture was found to be at the middle of the femur; the upper fragment tilted somewhat upwards. A Buck's extension was applied; it was, however, found difficult to keep the limb in good position owing to the restlessness of the child, and the patient was placed in an appliance similar to that described by Dr. Hamilton, two straight splints from axillæ to below the feet, and united by a cross-piece of wood at the bottom. Each lower extremity is bandaged to the side splints, and a swathe placed around the child's waist, and side splints. A week later, with the assistance of Dr. W. T. Bull, of New York, a plaster-of-Paris bandage was applied from the ankle to the hip and passing around the body. The child was etherized, and the limb extended by an assistant, counter-extension being made by perineal straps. Four days later the child was seized with measles, but the plaster bandage did not disturb the patient, and it was not removed until later. No excoriations were found under the bandage. The limb was in excellent position. Union was not complete, probably on account of the measles. The child died of diphtheria a few days later.

Case II. G. M., three years, fracture of middle of the left femur, referred to the hospital by Dr. J. B. Ayer. No displacement of fragment. Marked crepitus, but trochanter rotates on rotating limb. Under ether the diagnosis was verified; the rotation of the trochanter on rotating limb was found to be due to apposition of fragments in a perfectly transverse fracture. The limb was put up in a Buck's extension; this was changed to a Hamilton apparatus. Union was found to be good in three weeks, and a dextrine bandage was applied and worn for a fortnight. The patient was discharged on its removal. The position of the limb was excellent, and the union firm.

Case III. C. M., three years. Child referred to the hospital with fracture of the middle of left thigh. The patient was not brought to the hospital until two weeks after the fracture. There was at the time of entrance partial union, but slight bowing outwards of the thigh at the seat of fracture. The patient

was treated for a short time in the apparatus worn on entrance, a modified long Desault. A plaster-of-Paris bandage was applied later, the patient not being etherized, Dr. S. Martin, of Roxbury, being present. The plaster bandage was replaced by a silicate-of-potash bandage, covering a long external pasteboard splint. The patient was discharged four weeks after entrance, and six weeks after fracture, with good union, but with slight bowing outwards at the seat of fracture.

Note. These cases of fracture of the thigh are reported, as they illustrate that certain facts are to be borne in mind in treating this lesion in young children. There is less muscular resistance to overcome than in adults. The fracture is usually transverse, and there is less danger of overriding of the fragments. Children do not as a rule bear close confinement to bed as well as adults. Buck's extension was tried in the first and second case, and proved to be much less satisfactory than with adults, owing to the greater difficulty in keeping children quiet. Hamilton's method was tried in Cases I. and II., and proved much more efficient in keeping the child still. It, however, confines the patient very closely to a recumbent position, which is irksome to a child, and in delicate children favors hypostatic congestion and lobular pneumonia. The plaster-of-Paris bandage did not cause any chafing in the cases in which it was used. It could be kept quite neat by painting on the parts exposed to soiling through discharges a thick coating of shellac or asphalt. The weight of the appliance did not appear to be a serious annoyance to the children. Silicate-of-potash bandages are of course much lighter, but the time required for them to become stiff prevents their use in recent fractures. In the cases reported, the double inclined plane recommended by some surgeons for use in treating fractured thighs in children was not found necessary, as the tilting upward of the upper fragment was readily overcome.

SHORT COMMUNICATIONS.

CODE OF ETHICS.

BY ELLWOOD C. LESTER, M. D.

The Pea Ridge correspondent in his sketches of practice very graphically depicts the consummate meanness to which a physician may descend without violating the letter of the code of ethics. The assumed spirit of friendship for Dr. White, the faint praise, the innuendo of *limited experience*, with a quackish display of instruments and uncalled-for proceedings in arriving at the diagnosis of intestinal irritation, reveals a serpent more deadly than a rattlesnake, — a genuine sneaking copperhead, who quietly wounds his victim; a reptile which will bite in the dark, yet cower in the light of day. Every physician of experience has encountered such, and he is the most dangerous. He speaks of other physicians as clever fellows, good, social gentlemen, who *will* make good physicians after a while — all they need is a little experience, and they will be all right; or slightly insinuate they have some unfortunate weakness, and thus more cruelly stabs than one who proclaims himself an open enemy. Several years ago I encountered just such a fellow. He admitted many social virtues, but said *he had never seen my diploma*. A few days after I met him near my office, called him in, showed him the *questionable document*, and informed him that I dreaded a *skunk* more than a *wolf*. I know many physicians use consultations as a means of exalting themselves and degrading the attending physicians. By a wonderful display of learning, by imitating the Pea Ridge doctor in the use of entirely unnecessary instruments, and by half-expressed, half-suppressed innuendoes they create distrust, and thus steal patients from physicians.

It is remarkable that any physician would take the pains to teach the profession how to demean a brother physician and steal his patients without violating the code of ethics; and not less strange that a medical journal could be found ready to yield its pages to such base purposes without editorial rebuke, as one medical journal has done. The highly eminent physician who manufactures a secret nostrum and advertises it in newspapers under a woman's name is less reprehensible. It is baser to do base acts under the mantle of the code of ethics than under the petticoats of a woman. Both the doctor and the journal through which he teaches his professional legerdemain should receive the unqualified condemnation of the medical profession.

PHILADELPHIA, PENN.

[We are sorry to find that such a portrayal seems too true for fiction. — ED.]

ARE WOMEN ELIGIBLE TO THE MASSACHUSETTS MEDICAL SOCIETY.

MR. EDITOR, — From what has appeared in the JOURNAL, as well as in the public press, one would imagine that the above question had been definitely answered in the affirmative. A careful study of the by-laws has convinced me that this is not the case. By-law XXXIII. reads as follows: —

"ALTERATIONS OF BY-LAWS.

"XXXIII. All proposals for alteration of the by-laws shall be stated in writing.

"No alteration of a by-law shall take effect until it has received the concurrent vote of the councilors and the society; and no amendment affecting the import of said alteration shall be ingrafted on it without a concurrent vote. But the councilors or society may at any stated meeting, notice having been given at a previous stated meeting, or in the call for the meeting itself, adopt rules and orders for their better government, or alter, or amend, or annul the same, but these rules or orders shall not be temporarily suspended at any meeting, except by an affirmative vote of at least three fourths of the Fellows present.

"The society shall consider, and act on, by-laws at adjournments of anniversary meetings only, and not on the days of said meetings."

I have quoted the whole passage that I might not be accused of mutilating the sense, although the part relating to rules and orders for the government of either council or society has nothing do with the question. Now, as there has been no concurrent vote of the society, how is it possible to modify the by-laws so as to admit women?

The answer to this, no doubt, will be that as no by-law forbids their admission no legislation is necessary to sanction it.

It is true that there is no distinct prohibition, but there can, I think, be no doubt that the founders of the society and the framers of the laws did not anticipate that this would be construed into assent. The first by-law describes the qualifications of candidates, and in it we find always the pronoun *he* repeated a number of times.

Again, it is true that in laws and rules *he* is often used to refer to persons of both sexes, but only in cases where one could reasonably expect that both sexes were implicated. It needs no argument to show that only of late has the admission of women been favored by more than an insignificant faction. The feelings, or if you please the prejudices, of the society in old times were altogether against it, and it seems, at least to me, absurd that while the concurrent vote of council and society is necessary to change some paltry by-law, a matter of this consequence should be settled by the council alone. Serious complications may arise should any board of censors examine and admit women into the society, should it be shown afterwards that the council had exceeded its powers. The prudent course in this state of doubt would appear to be to lay the matter before the society.

THOMAS DWIGHT.

MORPHINE POISONING.

DR. COURTENAY, of Jamaica, contributes the following to the *British Medical Journal*, October 18th, to illustrate (1) the development of peculiar symptoms from the administration of morphia; (2) the marked physiological antagonism of belladonna to morphia, proved by the power of the former drug speedily to relieve the ill effects of the administration of the latter.

A male coolie, under treatment for lumbago in the Lucea Parochial Hospital, Jamaica, was ordered a hypodermic injection of one sixth of a grain of morphia, the injection to be repeated every night. This treatment was continued for three nights, and on the morning following the third use of the injection the patient complained of feeling unwell at breakfast, and retired to bed at 9.10 A. M., where he was seized with convulsions of a tetanic nature. His symptoms were the following: he was quite insensible, his eyes were widely opened and staring, the pupils slightly contracted, teeth clenched, face flushed, nostrils dilated, and breathing hurried. There was spasmodic contraction of the muscles of the upper extremity; the temperature was increased; the heart's action regular, though weak. This attack lasted for ten minutes, when consciousness returned; but on attempting to speak he was seized again, and the convulsions returned at gradually increasing intervals, until they finally left him at twelve, noon.

The treatment immediately adopted in this case was the administration of doses of ten drops of the tincture of belladonna every hour, with coffee and brandy, and the application of the extract of belladonna down the course of the spine. This treatment was continued for a few hours, and, all urgent symptoms having yielded to it, the belladonna was given in diminished doses of five drops every four hours, and continued for the two following days. At the end of that time, no recurrence of the convulsions having taken place, the ordinary treatment for lumbago was recommended, of course with the omission of the morphia injection.

[This is interesting in connection with the case entitled Unusual Effect of a Subcutaneous Injection of Morphine in our issue of October 30. It will be observed that the disease under treatment was lumbago in both instances.]

THE NATIONAL BOARD OF HEALTH.

To the Sanitarians of the United States.

By the act establishing the National Board of Health it is made the duty of the board to report to Congress at its next session a plan for a national public health organization, which plan shall be prepared after consultation with the principal sanitary organizations and the sanitarians of the several States of the United States, special attention being given to the subject of quarantine, both maritime and inland, and especially as to regulations which should be established between state or local systems of quarantine and a national quarantine system.

In order to fulfill this requirement, the National Board of Health has requested those interested in the subject to communicate their views to the board, and now respectfully invites members of state and local boards of health and sanitarians generally to meet with it in conference in the city of Nashville, Tenn., on the 18th to the 23d of November meeting of the American Public Health Association.

J. L. Cabell,
President National Board of Health.

T. J. Turner, Secretary.

THE CLIMATE OF NORDHOFF, VENTURA COUNTY, CAL.

Mr. Editor, — Allow me to call the attention of physicians who have patients and friends who must seek winter quarters, on account of throat affections, catarrh, and consumption, to a few facts relative to Southern California, and especially to this locality. Readers of the Journal will perhaps remember an article on Nordhoff [1] as a health resort, published October, 1877, by Dr. French. His statements, so far as I remember them, are essentially true. Dr. A. H. Adams, in the service of the American Board of Missions, saw the article while at his post in Japan, and had his wife, who had premonitory symptoms of phthisis well marked, remove to Nordhoff. Dr. Adams soon followed her, and he has resided here a year. He has just returned to Japan, fully satisfied with the result, and convinced that the climate of this locality has decided hygienic conditions, the best for *permanent* residence of any locality known to him. Mrs. Adams is to remain here for the

[1] In the Ojai Valley (pronounced Ohi).

present, although the symptoms of phthisis have "almost entirely" disappeared, in the belief that permanent benefit to one constitutionally disposed depends much on time and a favorable climate.

The writer of this article has been in Southern California five months, and from personal inquiry has collected the following statistics: —

The whole number of resident families at this date in the Ojai Valley is forty-nine. Of this number, thirty-six came here because some member of the family had premonitory symptoms of disease, or because, disease being developed after trial of other places, they could live nowhere else. The whole number of invalids at the present time is thirty-nine. Of these, twenty-seven are consumptive, eight have asthma, three have bronchitis, and one child, subject to frequent and violent attacks of croup before coming, now for four years has been entirely free from it.

Some of the cases of consumption were complicated. Hæmoptysis had occurred repeatedly in three of the cases before coming, but has not returned since. One of these has been here six years (and no return). He is the village storekeeper. One has a "chicken ranch," and the other has this year managed an estate from which he has just harvested six thousand seven hundred and thirty-three bushels of wheat. Some of the consumptives came here because of hereditary taint. Members of their families had died, and they feared the same fate awaited them. One woman, too weak to ride in the usual way, was brought here on a bed, and recovered. Of the twenty-seven cases only three are now considered dangerous. All the rest — twenty-four — are at work. Some of them say they are well; the rest greatly improved. This locality is favorable for bronchitis, but is especially so for asthma. All afflicted with asthma live here in comparative comfort. Some say they are well. Five of the eight cases were very severe. One man was brought here on a bed, but has been at work (after two months) ever since.

The Ojai Valley is separated from the Pacific Ocean by a mountain ridge, so that we have no direct sea winds. From July to October it is too warm for comfort for some days, or even weeks, but the nights are delightful. From October to July the weather is said to be perfect. The altitude of the lower Ojai Valley is one thousand feet. The upper valley is about fifteen hundred feet, the mountains five hundred feet higher. The religious and educational advantages are good. A seminary has been recently opened, where any one can be fitted for college. San Buenaventura is the nearest sea-port, fifteen miles over a very good stage road; thence access to San Francisco by steamer is easy. Probably there is no place where the patient can safely pass so much time out-of-doors in the year as here. One of the worst cases — a lady — has lived in a large tent under a group of live-oaks for the last five months. We have no rain here for about six months, yet young orchards are doing well, corn grows, and wheat is abundant.

A Physician.

SCARLATINA AND DIPHTHERIA.

Mr. Editor, — In the Journal for October 16th ultimo, page 542, Dr. Allen says: "The following propositions can be abundantly established by observation and the cases of the most reliable medical writers." I would like to have him or any one inform us how we can establish point 3: "That scarlatina anginosa may be complicated by diphtheritic exudation?" I have seen a membrane in scarlatina anginosa, but I never saw the clinical membrane of angina maligna in any form of scarlet fever.

James O. Whitney.

Pawtucket, R. I., *November* 6, 1879.

EMPYEMA IN AN INFANT AGED THIRTEEN MONTHS, CURED BY ASPIRATION.

Dr. Joseph Hunt, physician to the Wolverhampton and Staffordshire General Hospital, in the *Lancet*, October 25th, says: "The following case will serve as an addition to Dr. Barlow's list in the *Lancet* (December 21, 1878).

"Florence B., aged thirteen months, was brought to my out-patient room on November 26th, suffering from dyspnœa, emaciation, cough, and excessive night sweats, after an illness of a month's duration. On examination, the right side was bulged, and measured half an

inch more than the left, while expansion was very deficient; vocal fremitus present, but weakened; percussion dull all over, dullness scarcely extending over the middle line; breath sounds weak; no displacement of organs; no œdema; respiration 60; pulse almost imperceptible; weight fifteen and a quarter pounds; temperature (rectal, twelve midday) 100.4° F. The patient was immediately aspirated, and nearly five ounces of very thick sweet pus withdrawn. The respiration and pulse both improved during the operation, and the chest became resonant throughout almost its whole extent. The right side of the chest was firmly strapped, and the patient was ordered iron wine and cod-liver oil, of each half a drachm three times a day, and some gray powder.

"Although, contrary to advice, the child remained an out-patient, and had to be carried some distance in very inclement weather three times a weak, she progressed most satisfactorily. There was no fresh secretion of pus, as was proved by the introduction of the aspirator needle twice, — on November 29th and December 6th, — and she was discharged on December 22d in the following condition: Temperature normal. Gaining weight. Night sweats entirely ceased. Appearing, as the mother said, 'quite well.' Chest: good resonance to nipple; behind, absolute dullness commenced at the tenth rib, but there was deficient resonance above this, and the note up to the middle of the scapula was not so clear as on the other side; breath-sounds nearly as loud as on the opposite side. The right side now measured about a quarter of an inch less than the left, and expansion was still slightly deficient."

REPORTED MORTALITY FOR THE WEEK ENDING NOVEMBER 1, 1879.

Cities.	Population estimated for July, 1879.	Reported Deaths in each.	Deaths under Five Years.	Percentage of total Deaths from				
				The Principal "Zymotic" Diseases.	Diphtheria and Croup.	Lung Diseases	Diarrhœal Diseases.	Scarlet Fever.
New York	1,085,000	494	217	22.87	8.50	14.17	7.49	3.04
Philadelphia	901,380	225	—	23.33	5.77	4.00	1.73	0.87
Brooklyn	564,400	237	—	25.89	17.72	15.19	4.64	0.43
Chicago	—	—	—	—	—	—	—	—
St. Louis	—	91	39	16.48	5.49	3.29	3.29	1.09
Baltimore	393,796	122	47	38.52	10.65	5.74	2.46	7.38
Boston	360,000	140	60	31.43	12.86	10.00	11.43	1.43
Cincinnati	280,000	90	32	13.33	1.11	12.22	5.55	3.33
New Orleans	210,000	113	—	15.04	7.08	5.31	2.66	—
District of Columbia	170,000	57	22	10.53	5.26	8.77	3.51	1.76
Cleveland	160,000	60	34	40.00	16.66	1.67	1.67	18.33
Pittsburgh	—	67	27	41.79	20.89	7.40	6.00	4.48
Milwaukee	127,000	33	13	36.36	30.30	9.09	—	3.03
Providence	101,500	41	21	39.02	17.07	4.89	2.45	19.51
New Haven	60,000	14	6	21.43	14.29	7.14	—	—
Charleston	57,000	30	10	10.00	6.66	6.66	—	—
Nashville	27,000	9	—	55.55	11.11	—	11.11	—
Lowell	53,300	19	10	10.53	—	—	5.26	5.26
Worcester	52,500	20	6	10.00	—	—	—	5.00
Cambridge	51,400	9	6	44.44	—	11.11	44.44	—
Fall River	48,500	—	—	—	—	—	—	—
Lawrence	38,200	9	6	33.33	22.22	—	—	—
Lynn	34,000	10	5	20.00	10.00	—	—	—
Springfield	31,500	15	—	20.00	13.33	20.00	—	—
New Bedford	27,000	11	3	45.45	18.18	—	9.09	18.18
Salem	26,400	8	3	37.57	12.50	12.50	12.50	—
Somerville	23,350	9	—	33.33	22.22	—	—	11.11
Chelsea	20,800	7	—	—	—	14.29	—	—
Taunton	20,200	—	—	—	—	—	—	—
Holyoke	18,200	10	5	50.00	10.00	—	—	40.00
Gloucester	17,100	7	3	14.29	—	—	—	14.29
Newton	17,100	—	—	—	—	—	—	—
Haverhill	15,300	4	—	25.00	25.00	—	—	—
Newburyport	13,500	2	2	—	—	50.00	—	—
Pittsfield	12,650	3	—	—	—	—	—	—
Fitchburg	12,500	3	1	33.33	—	33.33	—	—
Milford	9,800	1	1	—	—	—		—

Nineteen hundred and seventy-eight deaths were reported: principal "zymotic" diseases (small-pox, measles, diphtheria and croup, diarrhœal diseases, whooping-cough, erysipelas,

and fevers) 455, consumption 327, diphtheria and croup 203, lung diseases 185, diarrhœal diseases 98, scarlet fever 66, typhoid fever 31, malarial fevers 25, whooping-cough 21, erysipelas eight, measles four, small-pox none. From *typhoid fever*, Philadelphia seven, New York five, Boston and Pittsburgh four, Cincinnati three, Baltimore two, Brooklyn, St. Louis, Cleveland, Milwaukee, Springfield, and Salem one. From *malarial fevers*, New Orleans six, New York five, Brooklyn and Nashville three, St. Louis and District of Columbia two, Baltimore, Boston, Pittsburgh, and New Haven one. From *whooping-cough*, New York, Philadelphia, Baltimore, and Boston three, Brooklyn, St. Louis, and Pittsburgh two, Cleveland, Charleston, and Fitchburg one. From *erysipelas*, New York two, Philadelphia, St. Louis, Baltimore, Worcester, Lawrence, and Lynn one. From *measles*, New York four. Diphtheria continues to increase; measles was more fatal, scarlet fever less so.

The meteorological record for the week in Boston was as follows: —

Date.	Barometer.	Thermometer.			Relative Humidity.				Direction of Wind.			Velocity of Wind.			State of Weather.[1]			Rainfall.	
	Mean.	Mean.	Maximum.	Minimum.	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	Duration.	Amount in Inches.
Oct. 26	30.600	44	59	25	64	13	33	37	W	SW	SW	9	11	10	C	C	C	—	—
" 27	30.150	52	60	40	52	34	60	49	SW	SW	SW	14	11	7	C	F	F	—	—
" 28	29.505	48	57	45	85	100	85	90	0	SE	W	0	10	13	O	R	O	9.7	.30
" 29	29.435	53	58	45	57	37	54	49	W	W	W	25	24	9	F	C	C	—	—
" 30	29.629	50	58	44	53	31	55	46	W	W	SW	9	28	19	F	F	F	—	—
" 31	29.947	40	49	36	48	31	45	41	W	W	W	20	29	20	C	F	C	—	—
Nov. 1	30.207	36	44	30	59	33	45	46	SW	W	W	14	29	16	C	F	C	—	—
Week.	29.924	88	55	38				51		W		2559 miles.						9.7	.30

[1] O., cloudy; C., clear; F., fair; G., fog; H., hazy; S., smoky; R., rain; T., threatening.

For the week ending October 11th, in 149 German cities and towns, with an estimated population of 7,517,642, the death-rate was 23.8 against 24.7 of the previous week. Three thousand four hundred and thirty-eight deaths were reported: diarrhœal diseases 446, consumption 391, acute diseases of the respiratory organs 208, diphtheria and croup 113, scarlet fever 83, typhoid fever 62, whooping-cough 60, puerperal fever 21, measles 18, small-pox none. The death-rates ranged from 9.6 to 37.4.

For the week ending October 18th, in the 20 English cities, with an estimated population of 7,383,999, the death-rate was 20.9 against 19.6 of the previous week. Two thousand nine hundred and sixty-three deaths were reported: diseases of the respiratory organs 318, scarlet fever 161, diarrhœa 125, measles 65, whooping-cough 52, fever 42, diphtheria 22, small-pox (London) one. The death-rates ranged from 12.4 to 25.8. Diarrhœa, typhoid fever, and small-pox continued to prevail in the Belgian cities; diarrhœa and typhoid fever in the larger Swiss towns.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U. S. ARMY, FROM NOVEMBER 1, 1879, TO NOVEMBER 7, 1879.

SUTHERLAND, CHARLES, colonel and surgeon. Having reported at division head-quarters, as medical director of the division, is assigned to duty at the Presidio of San Francisco, Cal., from this date. S. O. 134, Division of the Pacific and Department of California, October 24, 1879.

MUNN, C. E., captain and assistant surgeon. To take post at Fort Hays, Kansas, and after reporting there to proceed to Fort Garland, Colorado, and report to Colonel McKenzie, fourth cavalry, for duty with the column now organizing there. S. O. 217, Department of the Missouri, October 30, 1879.

HOFF, J. V. R., first lieutenant and assistant surgeon. When relieved by Assistant Sur-

geon Shufeldt to comply with orders from A. G. O. in his case. S. O. 98, C. S., Department of the Platte.

Shufeldt, R. M., first lieutenant and assistant surgeon. Relieved from duty at Fort Laramie and assigned to duty as post surgeon at Fort Fetterman, Wyoming Territory. S. O. 98, Department of the Platte, October 29, 1879.

Appel, D. M., first lieutenant and assistant surgeon. Relieved from duty at Fort Stanton and assigned to duty at Fort Bayard, New Mexico, as post surgeon. S. O. 109, District of New Mexico, October 31, 1879.

Appel, A. H., first lieutenant and assistant surgeon. Assignment to duty at Fort Bennett revoked, and to repair to Fort Pembina, Dakota Territory, and report to the commanding officer for duty as post surgeon. S. O. 118, Department of Dakota, October 27, 1879.

LIST OF CHANGES IN THE MEDICAL CORPS OF THE NAVY DURING THE WEEK ENDING NOVEMBER 7, 1879.

Surgeon E. S. Bogert and Passed Assistant Surgeon M. D. Jones detached from the U. S. S. Monongahela, and wait orders.

Passed Assistant Surgeon J. R. Waggener detached from the New York School Ship St. Mary's, and ordered to the receiving ship, Boston.

Assistant Surgeon C. W. Deane detached from the receiving ship, Boston, and wait orders.

Passed Assistant Surgeon John W. Ross detached from duty with the National Board of Health, and ordered to the School Ship St. Mary's.

Passed Assistant Surgeon George C. Lippincott detached from the Navy Yard, New York, and ordered to special duty, Bureau of Medicine and Surgery.

Assistant Surgeon C. J. Nourse detached from the receiving ship, Norfolk, and ordered to U. S. S. Tallapoosa, temporarily.

Passed Assistant Surgeon F. Anderson ordered to the Navy Yard, New York.

Assistant Surgeon J. E. Gardner ordered to the Receiving Ship Franklin, Norfolk, Va.

Books and Pamphlets Received. — A System of Midwifery, including the Diseases of Pregnancy and the Puerperal State. By William Leishman, M. D. Third American Edition, revised by the Author, with Additions by John S. Parry, M. D. With two hundred and five Illustrations. Philadelphia: Henry C. Lea. 1879. (A. Williams & Co.)

Tobacco Poisoning, and its Effect upon the Eyesight. By A. W. Calhoun, M. D., Atlanta, Ga.

Memorial Oration in Honor of Ephraim McDowell, "The Father of Ovariotomy." By Samuel D. Gross, M.D., LL D., D. C. L. Oxon. Louisville, Ky. 1879.

The Extirpation of the Ovaries for some of the Disorders of Menstrual Life. By William Goodell, A. M., M. D. Philadelphia. 1879.

Health Primers. The Skin and its Troubles. New York: D. Appleton & Co. 1879.

First Lines of Therapeutics. By Alexander Harvey, M. A., M. D. (Edin.) New York: D. Appleton & Co. 1879.

A Ministry of Health, and other Addresses. By Benjamin Ward Richardson, M. D., F. R. S., M. A., LL. D., F. S. A. New York: D. Appleton & Co. 1879.

Observations and Comments on Certain Convulsive Disorders. By Henry Day, M. D., Fellow of the Royal College of Physicians, London. A paper read before the Medical Society of London and selected for publication. London: J. and A. Churchill. 1879.

Essays on Infantile, Congenital, and Secondary Syphilis. By Edward N. Fishblatt, M. D. New York. 1879.

The Education of Girls as connected with their Growth and Physical Development. By Nathan Allen, M. D., of Lowell, Mass. Boston. 1879.